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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/813,775C

DATE: 03/18/2002 P.5
TIME: 15:26:57

Input Set : A:\GENENT.057CP2113001.txt

Output Set: N:\CRF3\03182002\I813775C.raw

4 <110> APPLICANT: DeSauvage, Frederick
5 Henner, Dennis, J.
7 <120> TITLE OF INVENTION: Novel chimpanzee erythropoietin
8 polypeptides and nucleic acids encoding the same
11 <130> FILE REFERENCE: GENENT.057CP2
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/813,775C
C--> 13 <141> CURRENT FILING DATE: 1999-05-07
13 <150> PRIOR APPLICATION NUMBER: US 09/307307
14 <151> PRIOR FILING DATE: 1999-05-07
16 <150> PRIOR APPLICATION NUMBER: US 09/552265
17 <151> PRIOR FILING DATE: 2000-04-19
19 <160> NUMBER OF SEQ ID NOS: 52
21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 2329
25 <212> TYPE: DNA
26 <213> ORGANISM: Pan troglodytes
28 <220> FEATURE:
29 <221> NAME/KEY: misc_feature
30 <222> LOCATION: (1)...(2329)
31 <223> OTHER INFORMATION: n = a, t, c or g
33 <400> SEQUENCE: 1
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35 cccgggatga gggcccccg tgtggtcacc cggcgcgcc caggctcgtg agggaccccg 120
36 gccaggcgcg gagatggggg tgcacggtga gtactcgcgg gctgggcgt cccgcccgc 180
37 cgggtccctg tttagcggg gatttagcgc ccgggctatt ggccgggagg tggctgggtt 240
38 caaggaccgg cgaacttgtc aggaccccg aagggggagg ggggtggggc agcctccacg 300
39 tgccagcggg gacttggggg agtccttggg gatggcaaaa acctgacctg tgaaggggac 360
40 acagtttggg ggttgagggg aagaaggttt gggggttctg ctgtgccagt ggagaggaa 420
W--> 41 ctgataagct gataacctgg gcgctggagc caccacttat ctgccagagg gnnntggta 480
42 gctgggggtg ggggtgtgcac acggcagcag gattgaatga aggccaggga ggcagcacct 540
43 gagtgtcttc atggttgggg acaggaagga cgagctgggg cagagacgtg gggatgaagg 600
44 aagctgtcct tccacagcca cctttctccc tccccgcctg actctcagcc tggctatctc 660
45 ttctagaatg tctgtcctgg ctgtggcttc tctgtcctt gctgtcgtc cctctgggce 720
46 tccagtcctt gggcgcccca ccacgcctca tctgtgacag ccgagtcctg gagaggtacc 780
47 tcttgagggc caaggaggcc gagaatatca cggtgagacc ccttccccag cacattccac 840
48 agaactcacg ctgagggtt cagggaactc ctcccagatc caggaaacctg gcacttgggt 900
49 tggggtggag ttgggaagct agacactgcc cccctacata agaataagtc tgggtggccc 960
50 aaaccatacc tggaaactag gcaaggagca aagccagcag atcctacggc ctgtgggcca 1020
51 gggccagagc cttcagggac ccttgactcc cggggtgtg tgcatttcag acgggctgtg 1080
52 ccgaacactg cagcttgaat gagaatatca ctgtcccaga caccaaagtt aatttctatg 1140
53 cctggaagag gatggagggt agttcctttt tttttttttt tcttttctt tggagaatct 1200
54 catttgcgag cctgattttg gatgaaaggg agaatgatcg agggaaaggt aaaatggagc 1260

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55 agcagagatg aggctgcctg ggcgcagagg ctcacgtcta taatcccagg ctgagatggc 1320
56 cgagatggga gaattgcttg agccctggag tttcagacca acctgggcag catagtgaga 1380
57 tcccccatct ctacaaacat ttaaaaaaat tagtcagggtg aggtggtgca tgggtgtagt 1440
58 cccagatatt tggaaggctg aggcgggagg atcgcttgag cccaggaatt tgaggctgca 1500
59 gtgagctgtg atcacaccac tgcactccag cctcagtgc agagtgaggc cctgtctcaa 1560
60 aaaagaaaag aaaaaagaaa aataatgagg gctgtatgga atacattcat tattcattca 1620
W--> 61 ctcactcatt cattcattca ttcattcnnn nnnctcttatt gcataacctt gtttgctcag 1680
62 cttggtgctt ggggctgctg aggggcagga gggagagggt ggcattgggtc agctgactcc 1740
63 cagagtccac tccctgtagg tcaggcagca ggccgtagaa gtctggcagg gcctggccct 1800
64 gctctcggaa gctgtcctgc ggggccaggc cctgttggtc aactcttccc agccgtggga 1860
65 gccctgcag ctgcatgtgg ataaagccgt cagtggcctt cgcagcctca ccactctgct 1920
66 tcgggctctg ggagcccagg tgagtaggag cggacacttc tgcttgccct ttctgtaaga 1980
67 aagggagaaag ggtcttgcta aggagtacag gaactgtccg tattccttcc ccttctgtgg 2040
68 cactgcagcg acctcctgtt ttctccttgg cagaaggaag ccatctcccc tccagatgog 2100
69 gcctcagctg ctccactccg aacaatcaact gctgacactt tccgaaaact cttccgagtc 2160
70 tactccaatt tcctccgggg aaagctgaag ctgtacacag gggaggcctg caggacaggg 2220
71 gacagatgac caggtgtgtc cacctgggca tatccaccac ctccctcacc aacattgctt 2280
72 gtgccacacc ctcccccgcc actcctgaac cccgtcgagg agctctcag 2329
74 <210> SEQ ID NO: 2
75 <211> LENGTH: 193
76 <212> TYPE: PRT
77 <213> ORGANISM: Pan troglodytes
79 <400> SEQUENCE: 2
80 Met Gly Val His Glu Cys Pro Ala Trp Leu Trp Leu Leu Leu Ser Leu
81 1 5 10 15
82 Leu Ser Leu Pro Leu Gly Leu Pro Val Leu Gly Ala Pro Pro Arg Leu
83 20 25 30
84 Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu Leu Glu Ala Lys Glu
85 35 40 45
86 Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His Cys Ser Leu Asn Glu
87 50 55 60
88 Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe Tyr Ala Trp Lys Arg
89 65 70 75 80
90 Met Glu Val Arg Gln Ala Val Glu Val Trp Gln Gly Leu Ala Leu
91 85 90 95
92 Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu Leu Val Asn Ser Ser
93 100 105 110
94 Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp Lys Ala Val Ser Gly
95 115 120 125
96 Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu Gly Ala Gln Lys Glu
97 130 135 140
98 Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala Pro Leu Arg Thr Ile
99 145 150 155 160
100 Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val Tyr Ser Asn Phe Leu
101 165 170 175
102 Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala Cys Arg Thr Gly Asp
103 180 185 190
104 Arg
106 <210> SEQ ID NO: 3

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Input Set : A:\GENENT.057CP2113001.txt

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107 <211> LENGTH: 585
108 <212> TYPE: DNA
109 <213> ORGANISM: Pan troglodytes
111 <400> SEQUENCE: 3
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113 ctgggcctcc cagtccctggg cgccccacca cgccctcatct gtgacagccg agtcctggag      120
114 aggtacctct tggaggccaa ggaggccgag aatatcacga cgggctgtgc cgaacactgc      180
115 agcttgaatg agaatatcac tgtcccagac accaaagtta atttctatgc ctggaagagg      240
116 atggaggtca ggcagcaggc cgtagaagtc tggcagggcc tggccctgct ctcggaagct      300
117 gtcctgcggg gccaggccct gttggtcaac tcttcccagc cgtgggagcc cctgcagctg      360
118 catgtggata aagccgtcag tggccttcgc agcctcacca ctctgcttcg ggctctggga      420
119 gccagaagg aagccatctc ccctccagat gcggcctcag ctgctccact ccgaacaatc      480
120 actgctgaca ctttccgcaa actcttccga gtctactcca atttccctcg gggaaagctg      540
121 aagctgtaca caggggaggc ctgcaggaca ggggacagat gacca                        585
123 <210> SEQ ID NO: 4
124 <211> LENGTH: 193
125 <212> TYPE: PRT
126 <213> ORGANISM: Homo sapiens
128 <400> SEQUENCE: 4
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130 1 5 10 15
131 Leu Ser Leu Pro Leu Gly Leu Pro Val Leu Gly Ala Pro Pro Arg Leu
132 20 25 30
133 Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu Leu Glu Ala Lys Glu
134 35 40 45
135 Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His Cys Ser Leu Asn Glu
136 50 55 60
137 Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe Tyr Ala Trp Lys Arg
138 65 70 75 80
139 Met Glu Val Gly Gln Gln Ala Val Glu Val Trp Gln Gly Leu Ala Leu
140 85 90 95
141 Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu Leu Val Asn Ser Ser
142 100 105 110
143 Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp Lys Ala Val Ser Gly
144 115 120 125
145 Leu Arg Ser Leu Thr Thr Leu Arg Ala Leu Gly Ala Gln Lys Glu
146 130 135 140
147 Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala Pro Leu Arg Thr Ile
148 145 150 155 160
149 Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val Tyr Ser Asn Phe Leu
150 165 170 175
151 Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala Cys Arg Thr Gly Asp
152 180 185 190
153 Arg
155 <210> SEQ ID NO: 5
156 <211> LENGTH: 193
157 <212> TYPE: PRT
158 <213> ORGANISM: Pan troglodytes
160 <400> SEQUENCE: 5

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161 Met Gly Val His Glu Cys Pro Ala Trp Leu Trp Leu Leu Ser Leu
162 1 5 10 15
163 Leu Ser Leu Pro Leu Gly Leu Pro Val Leu Gly Ala Pro Pro Arg Leu
164 20 25 30
165 Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu Leu Glu Ala Lys Glu
166 35 40 45
167 Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His Cys Ser Leu Asn Glu
168 50 55 60
169 Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe Tyr Ala Trp Lys Arg
170 65 70 75 80
171 Met Glu Val Arg Gln Gln Ala Val Glu Val Trp Gln Gly Leu Ala Leu
172 85 90 95
173 Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu Leu Val Asn Ser Ser
174 100 105 110
175 Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp Lys Ala Val Ser Gly
176 115 120 125
177 Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu Gly Ala Lys Lys Glu
178 130 135 140
179 Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala Pro Leu Arg Thr Ile
180 145 150 155 160
181 Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val Tyr Ser Asn Phe Leu
182 165 170 175
183 Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala Cys Arg Thr Gly Asp
184 180 185 190

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185 Arg

187 <210> SEQ ID NO: 6

188 <211> LENGTH: 4

189 <212> TYPE: PRT

190 <213> ORGANISM: Pan troglodytes

192 <400> SEQUENCE: 6

193 Met Glu Val Arg

194 1

195 <210> SEQ ID NO: 7

196 <211> LENGTH: 4

197 <212> TYPE: PRT

198 <213> ORGANISM: Pan troglodytes

200 <220> FEATURE:

201 <221> NAME/KEY: UNSURE

202 <222> LOCATION: 2, 4

203 <223> OTHER INFORMATION: Xaa = unknown amino acid

205 <400> SEQUENCE: 7

W--> 206 Asn Xaa Ser Xaa

207 1

208 <210> SEQ ID NO: 8

209 <211> LENGTH: 4

210 <212> TYPE: PRT

211 <213> ORGANISM: Pan troglodytes

213 <220> FEATURE:

214 <221> NAME/KEY: UNSURE

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Output Set: N:\CRF3\03182002\I813775C.raw

215 <222> LOCATION: 2, 4
 216 <223> OTHER INFORMATION: Xaa = unknown amino acid
 218 <400> SEQUENCE: 8
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 220 1
 221 <210> SEQ ID NO: 9
 222 <211> LENGTH: 4
 223 <212> TYPE: PRT
 224 <213> ORGANISM: Pan troglodytes
 226 <400> SEQUENCE: 9
 227 Glu Val Arg Gln
 228 1
 229 <210> SEQ ID NO: 10
 230 <211> LENGTH: 4
 231 <212> TYPE: PRT
 232 <213> ORGANISM: Pan troglodytes
 234 <400> SEQUENCE: 10
 235 Val Arg Gln Gln
 236 1
 237 <210> SEQ ID NO: 11
 238 <211> LENGTH: 4
 239 <212> TYPE: PRT
 240 <213> ORGANISM: Pan troglodytes
 242 <400> SEQUENCE: 11
 243 Arg Gln Gln Ala
 244 1
 245 <210> SEQ ID NO: 12
 246 <211> LENGTH: 18
 247 <212> TYPE: DNA
 248 <213> ORGANISM: Pan troglodytes
 250 <400> SEQUENCE: 12
 251 accgcgcccc ctggacag 18
 253 <210> SEQ ID NO: 13
 254 <211> LENGTH: 25
 255 <212> TYPE: DNA
 256 <213> ORGANISM: Pan troglodytes
 258 <400> SEQUENCE: 13
 259 catccacttc tccggccaaa ctcca 25
 261 <210> SEQ ID NO: 14
 262 <211> LENGTH: 21
 263 <212> TYPE: DNA
 264 <213> ORGANISM: Pan troglodytes
 266 <400> SEQUENCE: 14
 267 ttggtccgga gaagtggatg c 21
 269 <210> SEQ ID NO: 15
 270 <211> LENGTH: 31
 271 <212> TYPE: DNA
 272 <213> ORGANISM: Pan troglodytes
 274 <400> SEQUENCE: 15

→ Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

DATE: 03/18/2002

PATENT APPLICATION: US/09/813,775C

TIME: 15:26:58

Input Set : A:\GENENT.057CP2113001.txt

Output Set: N:\CRF3\03182002\I813775C.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:41 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:376 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:508 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:541 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:574 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:772 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:805 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:842 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34
L:879 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35
L:916 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:953 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37
L:990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:1027 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:1064 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40
L:1101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41
L:1138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42
L:1175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43
L:1212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44
L:1249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1286 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:1323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47
L:1360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48
L:1397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49